STATE OF NEW HAMPSHIRE
Department of Environmental Services
Air Resources Division

TITLE V OPERATING PERMIT

Proposed Permit

Permit No: **TV-0050**
Date Issued: **September 11, 2012**

This certifies that:

Wheelabrator New Hampshire, Inc. & NH/VT Energy Recovery Corporation
4 Liberty Lane West
Hampton, NH 03842

has been granted a Title V Operating Permit for the following facility and location:

Wheelabrator Claremont Company, L.P.
145 Grissom Lane
Claremont, NH 03743

Facility ID No: **3301900029**
Application No: **09-0005**, Renewal of Title V Operating Permit, received on January 2, 2009

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V application referenced above filed with the New Hampshire Department of Environmental Services under the signature of the responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official:

John LaRiviere
Plant Manager
603- 542-8764 ext. 12

Technical Contact:

Camille Gagnon
EH&S Director
603- 542-8764 ext. 16

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of the Code of Federal Regulations, Title 40, Part 70.

This Permit is effective upon issuance and expires on **xxxxx.**

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Acting Director, Air Resources Division

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ABBREVIATIONS

ARD	Air Resources Division
AAL	Ambient Air Limit
acf	actual cubic foot
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon monoxide
CPMS	Continuous Parameter Monitoring System
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
DSCFM	dry standard cubic feet per minute
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft^3	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
HCl	Hydrogen chloride
hp	horsepower
hr	hour
lb	pound
LPG	Liquefied Petroleum Gas
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standard
PACIS	Powdered Activated Carbon Injection System
PM_{10}	Particulate Matter < 10 microns
ppm	parts per million
ppmvd	parts per million dry volume
psig	pounds per square inch gauge
RACT	Reasonably Available Control Technology
RSA	Revised Statues Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SDA	Spray Dryer Absorber
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

Facility Specific Title V Operating Permit Conditions

I. Facility Description of Operations

Wheelabrator Claremont Company (Wheelabrator) operates a resource recovery facility in Claremont, New Hampshire. The resource recovery facility burns municipal solid waste (MSW) in two mass burn units that generate steam. The steam drives a turbine-generator to produce electricity for sale to the local utility. The gross generating capacity of the facility at the maximum capacity rating is nominally 6 megawatts (MW).

The MSW combustors are two identical, mass-fired, water wall boilers. Each unit is equipped with a single, auxiliary propane-fired burner. The flue gases from each MWC unit run through pollution control equipment that includes a Powdered Activated Carbon Injection system, a Spray Dryer Absorber and a Fabric filter. A time-shared continuous emission monitoring system (CEMS) is used to monitor the emissions of sulfur dioxide (SO_2) & carbon monoxide (CO). Each boiler stack is equipped with a continuous opacity monitoring system (COMS). Process parameters such as steam flow, carbon feed rate and fabric filter inlet temperature are also continuously measured and recorded.

The quenched bottom ash is transported via a drag conveyor to an ash handling room. The ash is loaded into containers and stored under cover until it is transported to the landfill. The facility exceeds the Title V major source threshold for nitrogen oxides (NOx) & hydrogen chloride (HCl) and is therefore required to obtain a Title V operating permit.

II. Permitted Activities

In accordance with all of the applicable requirements identified in the Permit, the Owner or Operator is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.

III. Emission Unit Identification

A. Significant Activities

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

Table 1 - Significant Activities

Emission Unit ID	Description of Emission Unit	Installation Date	Maximum Design Capacity and Permitted Fuel Types[1]
EU01	Municipal Waste Combustion Unit #1 - Reciprocating grate, stoker, water wall boiler Manufacturer: American Schack/Von Roll Grate Serial No. 12405-BX	1985-1986	43.1 million British Thermal Units per hour (MMBtu/hr) - 9,583 lbs/hr of municipal solid waste (MSW) types 0, 1, 2, 3 & 6 wastes. One propane-fired, auxiliary burner rated at 15 MMBtu/hr - equivalent to 159.6 gal/hr of propane
EU02	Municipal Waste Combustion Unit #2 - Reciprocating grate, stoker, water wall boiler Manufacturer: American Schack/Von Roll Grate Serial No. 12406-BX	1985-1986	43.1 MMBtu/hr - 9,583 lbs/hr of municipal solid waste (MSW) types 0, 1, 2, 3 & 6 wastes. One propane-fired, auxiliary burner rated at 15 MMBtu/hr - equivalent to 159.6 gal/hr of propane
EU03	134 hp Emergency Generator Manufacturer: Cummins Model # 6Bt5.9 Serial No. 44162313	1986	Diesel - equivalent to 5 gal/hr

[1] The hourly fuel rates presented in Table 1 are set assuming heating values of 4,500 Btu/lb for municipal solid waste, 137,000 Btu/gal for diesel and 94,000 Btu/gal of propane.

B. Stack Criteria

A. The following devices at the Facility shall have exhaust stacks that discharge vertically, without obstruction, and meet the criteria in Table 2:

Table 2 - Stack Criteria

Stack #	Emission Unit #	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
Stack 1 (dual flue stack)	EU01 & EU02	150	2.6

B. Stack criteria described in Table 2 may be changed without prior approval from the Division provided that:
   1. An air quality impact analysis is performed either by the facility or the Division (if requested by the facility in writing) in accordance with Env-A 606, Air Pollution Dispersion Modeling Impact Analysis Requirements, and the "Guidance and Procedure for Performing Air Quality Impact Modeling in New Hampshire," and
   2. The analysis demonstrates that emissions from the modified stack will continue to comply with all applicable emission limitations and ambient air limits.

C. All air modeling data and analyses shall be kept on file at the facility for review by the Division upon request.

D. The Owner or Operator shall provide written notification to the Division of the stack change within 15 days after making the change. Such notification shall include:
   1. A description of the change; and
   2. The date on which the change occurred.

IV. Insignificant Activities Identification

All activities at this facility, which meet the criteria identified in Env-A 609.04, shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

V. Exempt Activities Identification

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

VI. Pollution Control Equipment Identification

Air pollution control equipment listed in Table 3 shall be operated in order to meet permit conditions:

Table 3 - Pollution Control Equipment Identification

Pollution Control Equipment Number	Description of Equipment	Pollutant Controlled	Emission Unit Number
PCE1	Pulse jet fabric filter (FF)	Particulate matter (PM) & regulated metals	EU01
PCE2	Spray Dryer Absorber (SDA) - lime injection[2]	Acid gases: HCl & SO_2	
PCE3	Powdered Activated Carbon Injection System (PACIS)	Mercury (Hg)	
PCE4	Pulse jet fabric filter	PM & regulated metals	EU02
PCE5	SDA - lime injection[2]	Acid gases: HCl & SO_2	
PCE6	Powdered Activated Carbon Injection System	Hg	

VII. Alternative Operating Scenarios

No alternative operating scenarios were identified for this permit.

[2] Typical reagent material is hydrated lime (i.e., $Ca(OH)_2$). Additional alkali sorbent materials such as sodium bicarbonate may be added to the SDA in batches or semi-continuously.

VIII. Applicable Requirements

A. State-only Enforceable Operational and Emission Limitations

The Owner or Operator shall be subject to the state-only[3] operational and emission limitations identified in Table 4 below:

Table 4 - State-only Enforceable Operational and Emission Limitations

Item #	Applicable Requirements	Applicable Emission Unit	Regulatory Citation
1.	*24-hour and Annual Ambient Air Limit* The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, *Table Containing the List Naming All Regulated Toxic Air Pollutants*.	Facility Wide	Env-A 1400
2.	*Revisions of the List of RTAPs* In accordance with RSA 125-I:5 IV, if the Division revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is required to obtain or modify the permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification.	Facility Wide	RSA 125-I:5 IV
3.	*Precautions to Prevent, Abate, and Control Fugitive Dust* The Owner or Operator shall take precautions to prevent, abate, and control the emission of fugitive dust. Such precautions shall include but are not limited to wetting, covering, shielding, or vacuuming.	Facility wide	Env-A 1002.03
4.	*Sulfur Content Limitations for Gaseous Fuels* Gaseous fuels shall contain no more than 15 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.	EU01 & EU02	Env-A 1605.01 & FP-T-0108

[3] The term "state-only requirement" is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.184.

B. Federally Enforceable Operational and Emission Limitations

The Owner or Operator shall be subject to the federally enforceable operational and emission limitations identified in Table 5 below:

Table 5 - Federally Enforceable Operational and Emission Limitations

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
1.	*Emission limits for Small MWC Units* Each MWC unit shall comply with the following emission limits[4]:	EU01 & EU02	Env-A 3303.02 effective 2-2-08

Pollutant or Parameter	Emission Limit	Averaging Time	Compliance method
Particulate matter	27 milligrams (mg)/dry standard cubic meter (dscm), corrected to 7% oxygen (O_2)	3-run average (run duration specified in test method)	Stack test
Carbon monoxide	100 parts per million by dry volume at 7% O_2	4-hour block average, arithmetic mean	CEMS
Opacity	10 percent (6-minute average)	30 6-minute averages	Stack test
Cadmium	0.040 mg/dscm, corrected to 7% O_2	3-run average (run duration specified in test method)	Stack test
Lead	0.44 mg/dscm, corrected to 7% O_2	3-run average (run duration specified in test method)	Stack test
Mercury	0.028 mg/dscm, corrected to 7% O_2, or 85% control efficiency	3-run average (run duration specified in test method)	Stack test
Sulfur dioxide - daily limit	77 parts per million by volume (ppmv), or 50 percent of the potential sulfur dioxide emission concentration, corrected to 7% O_2 (dry basis)	24-hour daily block geometric average concentration or percent reduction	CEMS
Sulfur dioxide - monthly limit	29 ppmv, or 25 percent of the potential sulfur dioxide emission concentration, corrected to 7% O_2 (dry basis)	Monthly block geometric average concentration or percent reduction	CEMS
Hydrogen chloride	29 ppmv, or 5 percent of the potential hydrogen chloride emission concentration, corrected to 7% O_2 (dry basis)	3-run average (minimum run duration is 1 hour)	Stack test
Dioxins/furans	30 nanograms/dscm (total mass), corrected to 7% O_2 (dry basis)	3-run average (minimum run duration is 4 hours)	Stack test
Fugitive ash	Visible emissions for no more than 5 percent of hourly observation period	3 1-hour observation periods	Visible Emissions Test

[4] This permit condition streamlines the requirements contained in Env-A 3300 (effective February 2, 2008) and New Hampshire's original state plan for municipal waste combustion (which was approved by EPA with an effective date of April 11, 2003). New Hampshire's amended state plan containing the more stringent requirements of Env-A 3300 was submitted for EPA's approval on January 29, 2009.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
2.	a. The emission limits specified in Table 5, Item 1 apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction; b. Each startup, shutdown, or malfunction must not last for longer than 3 hours; c. A maximum of 3 hours of emissions data can be dismissed from compliance calculations during periods of startup, shutdown, or malfunction; d. During startup, shutdown, or malfunction periods longer than 3 hours, emissions data cannot be discarded from compliance calculations and all provisions under 40 CFR 60.11(d) apply.	EU01 & EU02	Env-A 3306.02
3.	*NOx RACT for Incinerators* NOx emissions from each MWC unit shall not exceed 0.53 lb/MMBtu, based on a 24-hour calendar day average.	EU01 & EU02	Env-A 1309.01 effective 10-31-10 (formerly Env-A 1211.09)
4.	Maximum municipal solid waste throughput for each MWC unit shall be limited to 36,500 tons/year.	EU01 & EU02	TP-C-52 & 53
5.	*Operating Practices for Municipal Waste Combustion Units* The Owner or Operator shall comply with the most stringent of the following limits on steam production rate for each MWC unit: a. 29,500 lbs/hr at 725^{o}F calculated as 4-hr block average; b. 110 percent of the maximum demonstrated load of the municipal waste combustion unit (4-hour block average), as specified under 40 CFR 60.1940.	EU01 & EU02	Env-A 3304.02
6.	*Operating Practices for Municipal Waste Combustion Units* The Owner or Operator shall not operate the municipal waste combustion unit so that the temperature at the inlet of the particulate matter control device exceeds 17^{o}C above the maximum demonstrated temperature of the particulate matter control device (4-hour block average), as specified under 40 CFR 60.1940.	EU01 & EU02	Env-A 3304.02
7.	*Operating Practices for Municipal Waste Combustion Units* a. For each MWC unit, the Owner or Operator shall maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent dioxins/furans or mercury test. b. The Owner or Operator must evaluate total carbon usage for each calendar quarter. The total amount of carbon purchased and delivered to the facility must be at or above the required quarterly usage of carbon. As	EU01 & EU02	Env-A 3304.02

[5] The Owner or Operator may take into account excess inventory resulting from excess purchases in previous quarter(s).

[6] Wheelabrator-Claremont uses equation (1) to calculate the required quarterly carbon usage on a plant basis.

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
	an option, the Owner or Operator may choose to evaluate required quarterly carbon usage on a municipal waste combustion unit basis for each individual municipal waste combustion unit at the facility. The required quarterly usage of carbon shall be calculated using either Equation (1) or (2) below[5]: **Plant basis:** [6] $C = \sum_{i=1}^{n} f_i * h_i$ --------- *Equation (1)* Where: C = required quarterly carbon usage for the facility in kilograms (or pounds). f_i = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate). h_i = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours). n = number of municipal waste combustion units, i, located at the facility. **Unit Basis:** C = f*h --------- *Equation (2)* Where: C = required quarterly carbon usage for the unit in kilograms (or pounds). f = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate). h = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours).		
8.	The municipal waste combustion units are exempt from limits on load level, temperature at the inlet of the particulate matter control device, and carbon feed rate during any of five situations: a. During annual tests for dioxins/furans. b. During annual mercury tests (for carbon feed rate requirements only). c. During the 2 weeks preceding annual tests for dioxins/furans. d. During the 2 weeks preceding annual mercury tests (for carbon feed rate requirements only). e. Whenever DES permits Wheelabrator Claremont to do any of five activities:	EU01 & EU02	Env-A 3304.02

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
	i. Evaluate system performance. ii. Test new technology or control technologies. iii. Perform diagnostic testing. iv. Perform other activities to improve the performance of municipal waste combustion unit(s). v. Perform other activities to advance the state of the art for emission controls for municipal waste combustion unit(s). f. The Owner or Operator shall notify DES prior to exercising the exemptions under above conditions.		
9.	*Operating Practices for Municipal Waste Combustion Units* The Owner or Operator shall comply with the facility staffing requirements specified in Env-Sw 1005.07.	EU01 & EU02	Env-A 3304.03
10.	The Owner or Operator shall comply with the following operating practice requirements: a. No toxic or hazardous wastes which are subject to the Resource Conservation and Recovery Act (RCRA) shall be burned at this facility; b. Prior to ash loadout and transport, all fires must be extinguished. The bottom ash, fly ash, and scrubber residue must be quenched or otherwise wetted to suppress fugitive dust. Ash transport vehicles must be totally enclosed or covered; c. During MWC unit startup, the control equipment listed in Table 3 shall not be by-passed while burning municipal solid waste; d. The MWC units shall be operated in conjunction with the air pollution control devices listed in Table 3; and e. Operate a DES approved temperature sensor system that continuously measures and records the combustion zone temperature.	EU01 & EU02	FP-T-0108
11.	The emergency generator shall only operate: a. As a mechanical or electrical power source when the primary power source for the facility has been lost during an emergency such as a power outage; b. During normal maintenance and testing as recommended by the manufacturer; or c. During periods in which ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions of 5% of normal operating voltage requiring more than 10 minutes to implement, voluntary load curtailments by customers, or automatic or manual load-shedding, in response to, or to prevent the occurrence of, unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels, or other such emergency conditions.	EU03	Env-A 1302.15

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
12.	The emergency generator shall be limited to 500 hours of operation during any consecutive 12-month period.	EU03	Env-A 1301.02(j)(1) (effective 10-31-2010) (formerly Env-A 1211.11(b))
13.	*Requirements for Emergency Stationary Reciprocating Internal Combustion Engines* The emergency generator shall be operated as follows after May 3, 2013: a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; c. Inspect hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; d. Minimize idle time during startup and minimize startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes; and e. Operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions.	EU03	40 CFR 63.6603 & 40 CFR 63.6625 Subpart ZZZZ
14.	Beginning May 3, 2013: a. The emergency generator shall be limited to 100 hours per year of operation for maintenance checks and readiness testing; b. The Emergency Stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as stated in Table 5, Item 11.c, above.	EU03	40 CFR 63.6640(f) Subpart ZZZZ
15.	*Maximum Sulfur Content Allowable in Liquid Fuels* The sulfur content of #2 fuel oil shall not exceed 0.40 percent sulfur by weight.	EU03	Env-A 1604.01(a)

Table 5 - Federally Enforceable Operational and Emission Limitations			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
16.	*Accidental Release Program Requirements* The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b. Design and maintain a safe facility; c. Take steps necessary to prevent releases; and d. Minimize the consequences of accidental releases that do occur.	Facility wide	CAAA 112(r)(1)
17.	*Protection of Stratospheric Ozone* If the Owner or Operator performs maintenance on, or services, repairs, or disposes of appliances containing regulated ozone depleting substances, the Owner or Operator shall comply with the standards for *Recycling and Emissions Reduction* pursuant to 40 CFR 82, Subpart F.	Facility wide	40 CFR 82 Subpart F
19.	*Permit Deviations* In the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels.	Facility Wide	Env-A 911.03

C. Training and Certification

Pursuant to Env-A 3305.01, Env-A 3305.02 and 40 CFR 60.1645 & §60.1675, Wheelabrator Claremont shall comply with the following requirements:

1. General Operator Training and Certification
   a. In accordance with 40 CFR 60.1645 and §60.1675, operator training and certification shall be obtained through the New Hampshire state program specified in Env-Sw 1600, *Operator Training and Certification*.
   b. The following employees at Wheelabrator Claremont shall complete the operator certification requirements specified in a. above:
      i. Chief facility operators;
      ii. Shift supervisors; and
      iii. Control room operators.
   c. An employee specified in b. above shall obtain operator certification no later than six months after the employee transfers to or is hired to work at the facility.
   d. To maintain certification, the trained and certified MWC operator shall complete an annual review or refresher course that meets the requirements specified in Env-Sw 1606.
   e. If all certified operators must be temporarily offsite, the MWC unit Owner or Operator shall comply with the requirements of 40 CFR 60.1685.
2. Plant-Specific Operator Training
   a. The following employees at Wheelabrator Claremont shall complete a plant-specific operator training course:
      i. Chief facility operators;
      ii. Shift supervisors;
      iii. Control room operators;
      iv. Ash handlers;
      v. Maintenance personnel; and
      vi. Crane or load handlers.
   b. The Owner or Operator shall develop and update on an annual basis a site-specific operating manual that shall include the following items:
      i. A summary of the applicable standards under Env-A 3300;
      ii. A description of basic combustion principles that apply to municipal waste combustion units;
      iii. Procedures for receiving, handling, and feeding municipal solid waste;
      iv. Procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustor units;
      v. Procedures for maintaining a proper level of combustion air supply;
      vi. Procedures for operating the municipal waste combustor units with the requirements contained in Env-A 3300;
      vii. Procedures for responding to periodic upset or off-specification conditions;
      viii. Procedures for minimizing carryover of particulate matter;

ix. Procedures for handling ash;

x. Procedures for monitoring emissions from the municipal waste combustor units; and

xi. Procedures for recordkeeping and reporting.

c. The Owner or Operator shall establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the MWC units. The initial review shall be completed before an employee assumes responsibilities that affect operation of the MWC units.

d. The manual shall be reviewed with staff annually.

e. The operating manual shall be kept in an easily accessible location at the facility. It must be available for review or inspection by all employees who must review it and by DES and EPA.

D. Emission Reductions Trading Requirements (State-only enforceable)

The Owner or Operator did not request emissions reductions trading in its operating permit application. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading, must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reductions Credits Trading Program*, or Env-A 3100 *Discrete Emissions Reductions Trading Program* and 42 U.S.C §§7401 et seq. (the "Act"), and must be provided for in this permit.

E. Monitoring and Testing Requirements

1. The Owner or Operator is subject to the monitoring and testing requirements as contained in Table 6 below:

Table 6 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
1.	Opacity	*Continuous Opacity Monitoring System* Operate and maintain a continuous opacity monitoring system for measuring the opacity of emissions from each MWC unit.	Continuous	EU01 & EU02	Env-A 3306.02
2.	SO_2, CO and diluent gas CEMS	*SO_2, CO and diluent gas Continuous Emission Monitoring System* a. Operate, calibrate and maintain continuous emissions monitoring system for SO_2, CO and diluent gas (O_2) which shall be used to determine compliance with SO_2 and CO emission limits established in Table 5, Item 1. The CEMS shall be operated and maintained in accordance with Env-A 808. b. Use the following methods in 40 CFR 60, Appendix A to validate pollutant concentration levels: i. SO_2 - Method 6 or 6C ii. CO - Method 10, 10A, or 10 B c. For measuring oxygen, use Method 3 or 3A of 40 CFR 60, Appendix A. d. Use EPA Reference Method 19 in 40 CFR 60, section 4.3, to calculate the daily geometric average concentrations of sulfur dioxide emissions. e. Use EPA Reference Method 19 in 40 CFR 60, Appendix A, section 4.1, to calculate the 4-hour block averages for concentrations of carbon monoxide.	Continuous	EU01 & EU02	Env-A 808.02(a)(2) (effective 10-31-2010) & Env-A 3306.02
3.	Minimum Specifications for CEMS and COMS	*Minimum Specifications for CEM Systems* The Owner or Operator shall ensure that each CEMS and COMS meets the following operating requirements: a. Each CEMS shall average and record the data for each calendar hour; b. Each COMS shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; c. All opacity and gaseous CEM systems shall; i. Include a means to display instantaneous values of percent opacity and gaseous emission	N/A	EU01 & EU02	Env-A 808.03 (effective 10-31-2010) & Env-A 3306.02

[7] This requirement is more stringent than 40 CFR 60.13(e) which requires CEMS to complete at least one cycle of operation (sampling, analyzing and recording) for each 15-minute period.

Table 6 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		concentrations; and ii. Complete a minimum of one cycle of operation, which shall include measuring, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions[7] and each 10-second period for systems measuring opacity, unless a longer time period is approved in accordance with Env-A 809. d. A valid hour of CEM emission data means: i. A minimum of 42 minutes of gaseous or opacity CEMS readings taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the facility is in operation; ii. For time-shared systems, 75% collection of gaseous CEM system concentration readings of the total sampling time available for each emission point being monitored for those periods of time the CEM is not in an out of control period as defined by Env-A 808.01(g), and the facility on which the CEM is installed is in operation.			
4.	Continuous steam flow monitor	a. The Owner or Operator must calibrate, maintain, and operate a steam flowmeter in accordance with the following: i. Continuously measure and record the measurements of steam in kilograms (or pounds) per hour. ii. Calculate the steam flow in 4-hour block averages. iii. Calculate the steam flow rate using the method in ''American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1—1964 (R1991),'' section 4 (incorporated by reference in § 60.17(h)(2)). iv. Design, construct, install, calibrate, and use nozzles or orifices for flow rate measurements, using the recommendations in ''American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, part II of Fluid Meters,'' 6th Edition (1971), chapter 4 (incorporated by reference in § 60.17(h)(3)). v. Before each dioxins/furans stack test, or at least once a year, calibrate all signal conversion elements associated with steam (or feed water) flow measurements according to the manufacturer	Continuously	EU01 & EU02	Env-A 3306.03

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		instructions. b. If the municipal waste combustion units have shared steam systems and steam load cannot be estimated per unit, the Owner or Operator must determine, to the satisfaction of DES, one or more operating parameters that can be used to continuously estimate load level (for example, the feed rate of municipal solid waste or refuse-derived fuel). The selected parameters must be continuously monitored.			
5.	Temperature of flue gases	The Owner or Operator shall calibrate, maintain, and operate a device to continuously measure the temperature of the flue gas stream at the inlet of each particulate matter control device.	Continuously	EU01 & EU02	Env-A 3306.03
6.	Carbon feed rate	For the powdered activated carbon injection system, the Owner or Operator must: a. Select a carbon injection system operating parameter that can be used to calculate carbon feed rate (for example, screw feeder speed); b. During each dioxins/furans and mercury stack test, determine the average carbon feed rate in kilograms (or pounds) per hour. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level; and c. Continuously monitor the selected operating parameter during all periods when the municipal waste combustion unit is operating and combusting waste and calculate the 8-hour block average carbon feed rate in kilograms (or pounds) per hour, based on the selected operating parameter. When calculating the 8-hour block average: i. Exclude hours when the municipal waste combustion unit is not operating. ii. Include hours when the municipal waste combustion unit is operating but the carbon feed system is not working correctly.	Continuously	EU01 & EU02	Env-A 3306.03

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
7.	Data collection (CPMS)	a. The Owner or Operator shall obtain 1-hour arithmetic averages for the following parameters: i. Load level of the municipal waste combustion unit(s). ii. Temperature of the flue gases at the inlet of particulate matter control device. iii. Carbon feed rate if activated carbon is used to control dioxins/furans or mercury emissions. b. Obtain at least two data points per hour in order to calculate a valid 1-hour arithmetic average. c. Obtain valid 1-hour averages for at least 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter. An operating day is any day the unit combusts any municipal solid waste. d. Failure to obtain the minimum data required in items (a) through (c) above is a violation of the data collection requirement, and DES must be notified in accordance with Table 9, Item 10.	As specified	EU01 & EU02	Env-A 3306.03
8.	QA/QC Plan Requirements	a. Prepare and maintain a quality assurance/quality control (QA/QC) plan, which shall contain written procedures for implementation of a QA/QC program that meets the criteria specified in 40 CFR 60, Appendix F, Procedure 1, section 3 for each CEMS; b. Review the QA/QC plan and all data generated by its implementation at least once each year; c. Revise or update the QA/QC plan, as necessary, based on the results of the annual review, by: i. Documenting the replacement of any damaged or malfunctioning CEM system components in order to maintain the collection of valid CEM data and to maximize data availability; ii. Documenting any changes made to the CEM or changes to any information provided in the monitoring plan submitted in accordance with Env-A 808.04; iii. Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system; iv. Describing how the audits and testing required by Env-A 808 will be performed; and v. Including examples of the reports that will be used to document the audits and tests required by	Review annually and revise as necessary	EU01 & EU02	Env-A 808.06 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		Env-A 808; d. Make the revised QA/QC plan available for on-site review by the Division at any time; and e. No later than April 15 of each year, either: i. Submit to DES the revised QA/QC plan and the reasons for each change, and certify in writing that the Owner or Operator is implementing the revised QA/QC plan; or ii. Certify in writing that no changes have been made to the plan and that the Owner or Operator will continue to implement the existing QA/QC plan. f. If DES requests a revision to the QA/QC plan, the Owner or Operator shall submit a revised plan within 45 days of the date of the request.			
9.	General Audit Requirements for All Gaseous and Opacity CEMS	The Owner or Operator shall audit each CEMS in accordance with the following: a. Required quarterly audits shall be conducted anytime during each calendar quarter, provided that successive quarterly audits shall occur no more than 4 months apart; b. Subject to (d) below, within 30 calendar days following the end of each quarter, the Owner or Operator shall submit to DES a written summary report of the results of all audits required by (a) above, that were performed during that quarter; c. The Owner or Operator shall notify DES: i. At least 30 days prior to the performance of a RATA; and ii. At least 2 weeks prior to any other planned audit or test procedure required under Env-A 808; d. The Owner or Operator shall file with the Division a written summary of the results of the RATA testing required by Env-A 808.08 by the earlier of 45 calendar days following the completion of the RATA test or the date established in the section of 40 CFR 60 that requires performance of the RATA.	Quarterly	EU01 & EU02	Env-A 808.07 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
10.	CEMS Audit Requirements	The Owner or Operator of a time-shared gaseous CEM system shall perform the following audits: a. In one of every 4 calendar quarters, a RATA of all emission points sampled by the CEM system as it operates in time-share mode, provided that: i. The RATAs can be conducted consecutively by taking reference method measurements at one emission point at a time and comparing to the data collected by the gaseous CEM system for the same emission point; or ii. The RATAs can be conducted simultaneously while using multiple sets of reference method equipment sampling all emission points and comparing to the respective data collected by the gaseous CEM system for each emission point; and b. In the remaining 3 calendar quarters, CGAs or RAAs at all emission points sampled by the gaseous CEM system.	Quarterly	EU01 & EU02	Env-A 808.08 (effective 10-31-2010) & Env-A 3306.02(c)
11.	COMS Audit Requirements	The Owner or Operator of an opacity CEM system required to meet the criteria of 40 CFR 60, Appendix B, Performance Specification 1, shall: a. Perform a quarterly Calibration Error Check, System Response Time Check, and Averaging Period Calculation and Recording Check, in accordance with 40 CFR 60, Appendix B, Performance Specification 1, sections 8.1(3)(ii), (iii), and (iv); b. Use a minimum of 3 calibration attenuators, calibrated as specified in 40 CFR 60, Appendix B, Performance Specification 1, section 7, to conduct the checks required by (1), above; and c. Perform annual 7-day Zero and Upscale Calibration Drift Tests, as specified in 40 CFR 60, Appendix B, Performance Specification 1, sections 8.1(4)(i) and (ii).	As specified	EU01 & EU02	Env-A 808.11 (effective 10-31-2010) & Env-A 3306.02(c)
12.	Data Availability Requirements	a. The Owner or Operator shall operate the CEM at all times during operation of the source, except for periods of CEM breakdown, repairs, calibration checks, preventive maintenance, and zero/span adjustments; b. The percent CEM data availability shall be maintained at a minimum of 90% on a calendar quarter basis for all opacity monitors and gaseous concentration monitors; c. The percent CEM data availability shall be calculated as follows: $$PercentDataAvailability = \frac{(VH + CalDT)x100}{(OH - AH)}$$ where: "VH" means the number of valid hours of CEM data in	N/A	EU01 & EU02	Env-A 808.12 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		a given time period for which the data availability is being calculated when the plant is in operation; "OH" means the number of facility operating hours during a given time period for which the data availability is being calculated; "AH" means the number of hours during facility operation when the performance of quarterly audits as required by those procedures specified in Env-A 808.08 through Env-A 808.11, as applicable, require that the CEM be taken out of service in order to conduct the audit; "CalDT" means the number of hours, not to exceed one hour per day, during facility operation when the CEM is not operating due to the performance of the daily CEM calibrations as required in 40 CFR 60, Appendix F.			
13.	Requirement for Substitute Emission Data	Any facility that uses the emissions data collected by a gaseous CEM system to calculate and report its annual emissions in accordance with Env-A 900 shall comply with the following: a. For any facility operating hour during which the gaseous CEM system has not collected a valid hour of CEM system data, the Owner or Operator shall submit to the Division substitute emission data for those hours which has been generated using **<u>one</u>** of the following methods: i. The missing data substitution procedures specified in 40 CFR 75, Subpart D; ii. If the missing data occurred during a period of steady-state operation, and not during a period of start-up, shutdown, or malfunction: 1. An average of the emissions data for the hours prior to and after the period of missing data during which valid CEM data was collected, or 2. Representative emissions data for the device at the same heat input rate, electric generating rate, or steam load; iii. If the missing data occurred during a start-up, shutdown, or malfunction of the device, substitute data collected by the CEM during a similar period of start-up, shutdown or malfunction, respectively; or iv. An alternative method of data substitution that meets the following criteria: 1. The alternative method was included in the monitoring plan submitted pursuant to Env-A 808.04;	N/A	EU01 & EU02	Env-A 808.13 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		2. The alternative method provides for representative emissions for the conditions of operation of the device during the period of missing data equivalent to the substitution methods described in (i) through (iii), above; and 3. The alternative method was approved by the Department as part of its approval of the monitoring plan pursuant to Env-A 808.04. b. For CEM systems and emissions not subject to the missing data substitution procedures of 40 CFR 75 Subpart D, sources shall include substitute emissions data in the calculation of total daily, monthly, quarterly, and annual emissions generated by the permitted device to quantify total actual emissions; c. Substitute emission data shall not be used in the calculation of emissions totals or averages in order to determine or demonstrate compliance with emissions standards; d. Substitute data shall not be included in the calculation of data availability.			
14.	Valid averaging period	The number of hours of valid CEM system data required for the calculation of a valid averaging period and for the determination of compliance for different emission standard periods shall be: a. For a 4-hour emission standard period, 3 hours of valid data; b. For a 24-hour emission standard period, 18 hours of valid data.	N/A	EU01 & EU02	Env-A 808.17 (effective 10-31-2010)
15.	NOx RACT Testing	The Owner or Operator shall determine compliance with the NO_x emission limit specified in Table 5, Item 3 for the two MWC units by conducting stack testing every year. Compliance stack testing shall be conducted in accordance with Env-A 802. The following test methods shall be used as applicable: a. Method 7, 7A, 7C, 7D or 7E as described in 40 CFR 60, Appendix A, to determine NOx concentrations in stack gases; b. Method 10 as described in 40 CFR 60, Appendix A, to determine carbon monoxide concentrations in stack gases; c. Methods 1 and 2, 2C, 2F, 2G, or 2H, 40 CFR 60, as described in Appendix A, to determine the exit flowrate of stack gases; d. Method 3 or 3A, as described in 40 CFR 60, Appendix A, to determine carbon dioxide, oxygen, excess air and molecular weight (dry basis) of stack gases;	Annually	EU01 & EU02	FP-T-0108, Env-A 802, Env-A 803.03 & 803.04 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		e. Method 4, as described in 40 CFR 60, Appendix A, to determine volume fraction of water vapor in stack gases.			
16.	Stack Testing Requirements for opacity, particulate matter, cadmium, lead, HCl, mercury, dioxins/furans and fugitive ash	a. Conduct annual stack test for opacity, particulate matter, cadmium, lead, HCl, mercury, dioxins/furans and fugitive ash. Each annual test shall be conducted no later than 13 months after the previous test. b. Follow Table 7 of this Permit to establish the sampling location and to determine pollutant concentrations, number of traverse points, individual test methods, and other specific testing requirements for the different pollutants. Alternate test methods may be used upon approval by the Department. c. Make sure that stack tests for all the pollutants consist of at least three test runs, as specified in 40 CFR 60.8. Use the average of the pollutant emission concentrations from the three test runs to determine compliance with the emission limits specified in Table 5, Item 1. d. Obtain an oxygen measurement at the same time as pollutant measurements to determine diluent gas levels, as specified in Table 6, Item 2. e. The following equations (3), (4) & (5) shall be used respectively to calculate emission levels at 7% oxygen (or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride emissions, and the reduction efficiency for mercury emissions. ▪ Concentration correction to 7 percent oxygen: $C_{7\%} = C_{unc} * (13.9) * [1/(20.9-CO_2)]$ --------- *Equation (3)* Where: $C_{7\%}$ = concentration corrected to 7 percent oxygen C_{unc} = uncorrected pollutant concentration CO_2 = concentration of oxygen (percent) ▪ Percent reduction in potential mercury emissions: $\%P_{Hg} = (E_i - E_o) * (100/E_i)$ --------- *Equation (4)* Where: $\%P_{Hg}$ = percent reduction of potential mercury emissions E_i = mercury emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis E_o = mercury emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis	As specified	EU01 & EU02	Env-A 3306.02 & Env-A 802 (effective 10-31-2010)

Table 6 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		Percent reduction in potential hydrogen chloride emissions: $\%P_{HCl} = (E_i - E_o) * (100/E_i)$ --------- *Equation (5)* Where: $\%P_{HCl}$ = percent reduction of the potential hydrogen chloride emissions E_i = hydrogen chloride emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis E_o = hydrogen chloride emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis.			
		f. The Owner or Operator may test less often if all stack tests for a given pollutant over 3 consecutive years show compliance with the emission limit. In that case, the Owner or Operator is not required to conduct a stack test for that pollutant for the next 2 years. However, the Owner or Operator must conduct another stack test within 36 months of the anniversary date of the third consecutive stack test that shows compliance with the emission limit. Thereafter, the Owner or Operator must perform stack tests every 3rd year but no later than 36 months following the previous stack tests. If a stack test shows noncompliance with an emission limit, the Owner or Operator must conduct annual stack tests for that pollutant until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant. The provision applies to all pollutants subject to stack testing requirements: dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash.			
17.	General Stack Testing Requirements	Compliance stack testing shall be planned and carried out in accordance with the following schedule: a. A pre-test protocol shall be submitted to the Division at least 30 days prior to the commencement of testing. The pre-test protocol shall contain the information specified in Env-A 802.04; b. At least 15 days prior to the test date, the Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Division representative in person or over the telephone; c. A test report shall be submitted to the Division within 60 days after the completion of testing. The test report shall contain the information specified in Env-A 802.11(c); d. A compliance test shall be conducted under one of the following operating conditions: i. Between 90 and 100 percent, inclusive, of	As specified	EU01 & EU02	Env-A 802

Table 6 - Monitoring/Testing Requirements

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
		maximum production rate or rated capacity; ii. A production rate at which maximum emissions occur; or iii. At such operating conditions agreed upon during a pre-test meeting conducted pursuant to Env-A 802.05.			
18.	Inspection/ Maintenance	The Owner or Operator shall annually inspect and perform maintenance on each fabric filter according to manufacturer's recommendations and/or current facility maintenance practices.	As specified	PCE1 & PCE4	40 CFR 70.6(a)(3)
19.	Combustion temperature	The Owner or Operator shall operate a DES-approved temperature sensor system that continuously measures and records the combustion zone temperature.	Continuously	EU01 & EU02	FP-T-0108 (State-only enforceable)
20.	Hours of Operation	Emergency generator shall be equipped with a non-resettable hour meter by May 3, 2013.	Continuous	EU03	40 CFR 63.6625 Subpart ZZZZ
21.	Sulfur content of gaseous fuels	Conduct testing to determine the sulfur content in grains of sulfur per 100 cubic feet, of gaseous fuels.	Upon written request by EPA or DES	Facility Wide	Env-A 806.03 (effective 10-31-2010)
22.	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI

2. The Owner or Operator shall follow Table 7 to establish the sampling location, and to determine pollutant concentrations, number of traverse points, individual test methods, and other specific testing requirements for the different pollutants:

Table 7 - Requirements for Stack Tests

To measure the following pollutants	Use the following methods in Appendix A of 40 CFR 60 to determine the sampling location	Use the following methods in Appendix A of 40 CFR 60 to measure pollutant concentration	Also note the following additional information
Organics Dioxins/Furans	Method 1	Method 23[8]	The minimum sampling time must be 4 hours per test run.
Metals Cadmium Lead Mercury	Method 1	Method 29[5]	
Opacity	Method 9	Method 9	Use Method 9 to determine compliance with opacity limits. 3-hour observation period (thirty 6-minute averages).
Particulate Matter	Method 1	Method 5 or 29	The minimum sample volume must be 1.0 cubic meter. The probe and filter holder heating systems in the sample train must beset to provide a gas temperature no greater than 160$\pm$14 ^{o}C. The minimum sampling time is 1 hour.
Acid Gases Hydrogen Chloride	Method 1	Method 26 or 26A[5]	Test runs must be at least 1 hour long.
Other Fugitive Ash	Not applicable	Method 22 (visible emissions)	The three 1-hour observation period must include periods when the facility transfers fugitive ash from the MWC unit to the area where the fugitive ash is stored or loaded into containers or trucks.

[8] Must simultaneously measure oxygen (or carbon dioxide) using Method 3A or 3B in Appendix A of 40 CFR 60.

F. Recordkeeping Requirements

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 8 below:

Table 8 - Applicable Recordkeeping Requirements

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Citation
1.	Retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B) & Env-A 3307.02
2.	Maintain records of actual emissions for each significant and insignificant activity for determination of emission based fees.	Annually	Facility wide	Env-A 705.03
3.	*Air Pollution Control Device Operational Records* Maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by DES/EPA upon request.	At each occurrence	PCE1, PCE2, PCE3, PCE4, PCE5 & PCE6	Env-A 906.01 (effective 10-1-2010) & FP-T-0108
4.	*General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems* Maintain records for the CEMS and COMS in accordance with Env-A 800 and all applicable federal regulations.	As specified in Env-A 800 and applicable federal regulations	EU01 & EU02	Env-A 903.04 (effective 10-1-2010)
5.	*General Recordkeeping Requirements for Combustion Devices* Maintain the following records of fuel characteristics and utilization for the fuel used in each combustion device: a. Amount and type of waste burned in each MWC unit; b. Amount of propane and diesel combusted; and c. Hours of operation for each device.	Monthly	Facility wide	Env-A 903.03 (effective 10-1-2010) & FP-T-0108
6.	*Liquid Fuel Oil Recordkeeping Requirements* The Owner or Operator shall maintain fuel delivery tickets that contain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.	Whenever there is a change in fuel supplier but at least annually	EU03	Env-A 806.05 (effective 10-31-2010)
7.	*General NOx Recordkeeping Requirements* Maintain records of the following information: a. Identification of each combustion device; b. Operating schedule during the high ozone season (June 1 through August 31) for each combustion device identified in Table 8, Item 7.a, above, including: i. Typical hours of operation per day;	Maintain up-to-date data	Facility wide	Env-A 905.02 (effective 10-1-2010) & FP-T-0108

Table 8 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Citation**
	ii. Typical days of operation per calendar month; iii. Number of weeks of operation; iv. Type and amount of fuel burned; v. Heat input rate in MMBtu/hr or for incinerators, in tons per hour; vi. Actual NOx emissions for the calendar year and a typical high ozone day in pounds per day; and vii. Emission factors and the origin of the emission factors used to calculate the NOx emissions.			
8.	The Owner or Operator shall keep the following records for operator training and certification: a. Records of provisional certifications - The following three items shall be included: i. For the municipal waste combustion facility, names of the chief facility operator, shift supervisors and control room operators who are provisionally certified by American Society of Mechanical Engineers (ASME) or New Hampshire approved certification program; ii. Dates of the initial provisional certifications; iii. Documentation showing current provisional certifications. b. Records of full certifications - The following three items shall be included: i. For the municipal waste combustion facility, names of the chief facility operator, shift supervisors and control room operators who are fully certified by New Hampshire-approved certification program; ii. Dates of initial and renewal full certifications; iii. Documentation showing current full certifications. c. Records showing completion of the operator training course - The following three items shall be included: i. For the municipal waste combustion facility, names of the chief facility operator, shift supervisors, and control room operators who have completed the EPA or New Hampshire State municipal waste combustion operator training course; ii. Dates of completion of the operator training course;	On a continuous basis	EU01 & EU02	Env-A 3307.02(a)

Table 8 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Citation**
	iii. Documentation showing completion of operator training course. d. Records of reviews for plant-specific operating manuals - The following three items shall be included: i. Names of persons who have reviewed the operating manual. ii. Date of the initial review. iii. Dates of subsequent annual reviews. e. Records of when a certified operator is temporarily offsite - The following two items shall be included: i. If the certified chief facility operator and certified shift supervisor are offsite for more than 12 hours, but for 2 weeks or less, and no other certified operator is onsite, the dates that the certified chief facility operator and certified shift supervisor were offsite shall be recorded. ii. When all certified chief facility operators and certified shift supervisors are offsite for more than 2 weeks and no other certified operator is onsite, the following four items shall be recorded: 1. A notice that all certified persons are offsite. 2. The conditions that cause those people to be offsite. 3. The corrective actions the facility is taking to ensure a certified chief facility operator or certified shift supervisor is onsite. 4. Copies of the written reports submitted every 4 weeks that summarize the actions taken to ensure that a certified chief facility operator or certified shift supervisor will be onsite. f. Records of calendar dates. The calendar dates shall be included on each record.			
9.	The Owner or Operator shall keep the following records for stack tests: a. The results of the stack tests for the following nine pollutants or parameters: i. Dioxins/furans ii. Cadmium iii. Lead iv. Mercury	On a continuous basis	EU01 & EU02	Env-A 3307.02 & Env-A 906.01

Table 8 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Citation**
	v. Opacity vi. Particulate matter vii. Hydrogen chloride viii. Fugitive ash ix. NOx b. Test reports including supporting calculations that document the results of all stack tests. c. The maximum demonstrated load of the municipal waste combustion units and maximum temperature at the inlet of the fabric filter during all stack tests for dioxins/furans emissions. d. The calendar date of each record.			
10.	The Owner or Operator shall keep the following records for the continuously monitored pollutants or parameters: a. Records of monitoring data: The five parameters measured using continuous monitoring systems shall be documented: i. All 6-minute average levels of opacity. ii. All 1-hour average concentrations of sulfur dioxide emissions. iii. All 1-hour average concentrations of carbon monoxide emissions. iv. All 1-hour average load levels of the MWC unit(s). v. All 1-hour average flue gas temperatures at the inlet of the fabric filter. b. Records of average concentrations: i. All 24-hour daily & monthly block geometric average concentrations of sulfur dioxide emissions. ii. All 4-hour block arithmetic average concentrations of carbon monoxide emissions. iii. All 4-hour block arithmetic average load levels of the municipal waste combustion units. iv. All 4-hour block arithmetic average flue gas temperatures at the inlet of the baghouse. c. Records of exceedances: The following three items shall be documented: i. Calendar dates whenever any of the four pollutant or parameter levels recorded in Item	On a continuous basis	EU01 & EU02	Env-A 3307.02 Federally Enforceable

Table 8 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Citation**
	#10.b. above or the opacity level recorded in Item #10.a.i. did not meet the emission limits or operating levels specified in this permit. ii. Reasons the MWC units exceeded the applicable emission limits or operating levels. iii. Corrective actions the Owner or Operator took or is taking to meet the emission limits or operating levels. d. Records of minimum data: The following three items shall be documented: i. Calendar dates for which the Owner or Operator did not collect the minimum amount of data required under Items 3 and 7 of Table 6. Dates for four types of pollutants and parameters shall be recorded: 1. Sulfur dioxide emissions. 2. Carbon monoxide emissions. 3. Load levels of the MWC unit(s). 4. Temperatures of the flue gases at the inlet of the fabric filter. ii. Reasons for not collecting the minimum data. iii. Corrective actions that the Owner or Operator took or is taking to obtain the required amount of data. e. Records of exclusions: The Owner or Operator shall document any exclusions of data from the calculation of averages for any of the following four pollutants or parameters and the reasons the data were excluded: i. Sulfur dioxide emissions. ii. Carbon monoxide emissions. iii. Load levels of the municipal waste combustion unit(s). iv. Temperatures of the flue gases at the inlet of the fabric filter. f. Records of drift and accuracy: The Owner or Operator shall document the results of daily drift tests and quarterly accuracy determinations according to Procedure 1, Appendix F of 40 CFR 60. The Owner or Operator shall keep these records for sulfur dioxide and carbon monoxide continuous emissions monitoring systems. g. Records of calendar dates: The Owner or Operator			

Table 8 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Citation**
	shall include the calendar date on each record.			
11.	The Owner or Operator shall keep the following five records for the usage of activated carbon: a. Records of average carbon feed rate: The following five items shall be documented: i. Average carbon feed rate in kilograms (or pounds) per hour during all stack tests for dioxins/furans and mercury emissions. All supporting calculations shall be included in the records. ii. For the operating parameter chosen to monitor carbon feed rate, average operating level during all stack tests for dioxins/furans and mercury emissions. The supporting data that document the relationship between the operating parameter and the carbon feed rate shall be included. iii. All 8-hour block average carbon feed rates in kilograms (or pounds) per hour calculated from the monitored operating parameter. iv. Total carbon purchased and delivered to the facility for each calendar quarter. If the Owner or Operator chooses to evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, the total carbon purchased and delivered for each individual municipal waste combustion unit at the facility shall be recorded. The supporting documentation shall be included. v. Required quarterly usage of carbon for facility, calculated using equations (1) and (2). If the Owner or Operator chooses to evaluate required quarterly usage for carbon on a MWC unit basis, the required quarterly usage for each MWC unit at the facility shall be recorded. The supporting calculations shall be included. b. Records of low carbon feed rates: The following three items shall be documented: i. The calendar dates when the average carbon feed rate over an 8-hour block was less than the average carbon feed rates determined during the most recent stack test for dioxins/furans or mercury emissions (whichever has a higher feed rate). ii. Reasons for the low carbon feed rates. iii. Corrective actions the Owner or Operator took or	On a continuous basis	EU01 & EU02	Env-A 3307.02

Table 8 - Applicable Recordkeeping Requirements

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Citation
	is taking to meet the 8-hour average carbon feed rate requirement. c. Records of minimum carbon feed rate data: The following three items shall be documented: i. Calendar dates for which the Owner or Operator did not collect the minimum amount of carbon feed rate data required under Table 6, Item 7. ii. Reasons for not collecting the minimum data. iii. Corrective actions the Owner or Operator took or are taking to get the required amount of data. d. Records of exclusions: The Owner or Operator shall document any exclusions of data from the calculation of average carbon feed rates and the reasons the data were excluded. e. Records of calendar dates. The calendar date on each record shall be included.			
12.	The Owner or Operator shall maintain records of annual inspection and maintenance conducted on the fabric filters.	Maintain on a continuous basis	Facility Wide	40 CFR 70.6 (a)(3)(iii)(A)
13.	*Regulated Toxic Air Pollutants* The Owner or Operator shall maintain records documenting compliance with Env-A 1400.	Maintain Up-to-Date Data	Facility wide	Env-A 902.01 (effective 4-21-2007)
14.	*Operation Log for the Emergency Generator* The Owner or Operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Owner or Operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Owner or Operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.	Keep a running Log	EU03	40 CFR 63.6655 Subpart ZZZZ
15.	Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Section XXVIII of this Permit.	Maintain Up-to-date Data	Facility Wide	Env-A 911 (effective 4-21-2007)

G. Reporting Requirements

1. Pursuant to Env-C 203.02(b), *Date of Issuance or Filing*, written documents shall be deemed to have been filed with or received by the Division on the actual date of receipt by the Division, as evidenced by a date stamp placed on the document by the Division in the normal course of business.

2. All emissions data submitted to the Division shall be available to the public. Claims of confidentiality for any other information required to be submitted to the Division pursuant to this permit shall be made at the time of submission in accordance with Env-A 103, Claims of Confidentiality.

3. The Owner or Operator shall be subject to the reporting requirements identified in Table 9 below:

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	As specified in Section XXI. B.	Facility wide	40 CFR 70.6(c)(1)
2.	*Annual Emissions Report* Submit an annual emissions report which shall include the following information: a. Actual calendar year emissions from each device of NOx, CO, SO_2, TSP, VOCs, HAPs, and RTAPs (speciated by individual RTAP); b. The methods used in calculating such emissions in accordance with Env-A 705.02, *Determination of Actual Emissions for Use in Calculating Emission-Based Fees*; and c. All information recorded in accordance with Table 8, Item 5.	Annually (received by DES no later than April 15th of the following year)	Significant & Insignificant Activities	Env-A 907.01
3.	*Semi-annual Permit Deviation and Monitoring Report* The Owner or Operator shall submit a semi-annual permit deviation and monitoring report, which contains: a. Summaries of all monitoring and testing requirements contained in this permit; and b. A summary of all permit deviations that have occurred during the reporting period.	Semi-annually received by DES no later than July 31st and January 31st of each calendar year.	Facility Wide	Env-A 911 & 40 CFR 70.6(a)(3)(iii)(A)
4.	*Payment of Emission-Based Fee* Annual reporting of emission based fees shall be conducted in accordance with Section XXIII of this Permit.	Annually (received by DES no later than April 15th of the following year)	Significant & Insignificant Activities	Env-A 705.04
5.	If the Owner or Operator of the source discovers that it has failed to meet the percent data availability requirement in the previous calendar quarter or in the calendar quarter in which it currently is	As specified	EU01 & EU02	Env-A 808.12(e) & Env-A 911.04(c)

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	operating, the Owner or Operator of the source shall: a. Notify DES by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 10 days of discovery of the permit deviation; b. Submit a plan to the Division, within 30 days of discovery, specifying in detail the steps it plans to take in order to meet the availability requirements for future calendar quarters; and c. Implement the plan to meet the data availability requirements no later than 30 days after the end of the quarter of failure.			
6.	Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	Annually (received by DES no later than April 15th of the following year)	Facility wide	40 CFR 70.6(c)(1)
7.	*NO_x Emission Statement Reporting Requirements* Submit a report which contains: a. A breakdown of NOx emissions reported pursuant to Table 9, Item 2 by month; and b. All data recorded in accordance with Table 8, Item 7.	Annually (received by DES no later than April 15th of the following year)	Facility wide	Env-A 909 (effective 10-31-2010) & FP-T-0108
8.	*Quarterly Emission Report* Submit to DES emission reports containing the following information: a. Excess emission data recorded by the CEM system, including: i. The date and time of the beginning and ending of each period of excess emission; ii. The actual emissions measured by the CEM system during the excess emission; iii. The total amount of emissions above the emissions limit, or percent above the emissions limit, during the period of excess emissions; iv. The specific cause of the excess emission; and v. The corrective action taken; b. If no excess emissions have occurred, a statement to that effect; c. For gaseous measuring CEM systems, the daily averages of the measurements made and emission rates calculated; d. A statement as to whether the CEM system was inoperative, repaired, or adjusted during the reporting period; e. If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information:	Quarterly (received by DES no later than 30 days following the end of each quarterly reporting period)	EU01 & EU02	Env-A 808.14, Env-A 808.16 (effective 10-31-2010) & FP-T-0108

Table 9 - Applicable Reporting Requirements				
Item #	**Reporting Requirements**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Citation**
	i. The date and time of the beginning and ending of each period when the CEM was inoperative; ii. The reason why the CEM was inoperative; iii. The corrective action taken; f. For all "out of control periods" the following information: i. Beginning and ending times of the out of control period; ii. The reason for the out of control period; iii. The corrective action taken. g. The date and time of the beginning and ending of each period when the source of emissions which the CEM system is monitoring was not operating; h. The span value, as defined in Env-A 101.176, and units of measurement for each analyzer in the CEM system; i. When calibration gas is used, the following information: i. The calibration gas concentration; ii. If a gas bottle was changed during the quarter: 1. The date of the calibration gas bottle change; 2. The gas bottle concentration before the change; 3. The gas bottle concentration after the change; iii. The expiration date for all calibration gas bottles used. j. The percent data availability calculated in accordance with Table 6, Item 12 for each gaseous and opacity monitor in the CEM system; k. In addition to the daily averages as specified in Item 8.c above, the Owner or Operator shall include the following emissions data in the quarterly emissions report: 1. 4-hr block averages for CO; 2. Monthly block averages for SO_2. Required 4-hour block CO data from the CEM must be submitted in electronic format approved as part of the CEM monitoring plan; and l. All information required above shall be clearly indicated, labeled, and formatted such that compliance with all emissions standards to which the source is subject, can be determined and any periods of excess emissions, substitution of missing or invalid CEM data, CEM calibration, CEM maintenance, or startup, shutdown, or malfunction can be easily identified.			
9.	<u>*Reporting Valid and Substitute Data*</u> Even if sufficient valid hours have been measured by the CEM system necessary for calculation of a valid averaging period as defined in Table 6, Item 14, the Owner or Operator shall still report for any invalid hours that occurred during the emission standard period the substitute data, as approved in accordance with Env-A	N/A	EU01 & EU02	Env-A 808.18 (effective 10-31-2010)

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	808.13, that will be used to determine the facility's total emissions.			
10.	*Annual Reports* a. The annual report shall be submitted no later than February 1 of each year that follows the calendar year in which the data was collected. Upon approval by DES, the Owner or Operator may submit electronic reports. b. The Owner or Operator shall include in the annual report a summary of data collected for all pollutants and parameters regulated under Env-A 3300. The summary shall include twelve items: i. The results of the annual stack test for the following eight pollutants: 1. Dioxins/furans 2. Cadmium 3. Lead 4. Mercury 5. Opacity 6. Particulate matter 7. Hydrogen chloride 8. Fugitive ash ii. A list of the highest average levels recorded, in the appropriate units. The Owner or Operator shall list those values for four pollutants or parameters: 1. Sulfur dioxide emissions. 2. Carbon monoxide emissions. 3. Load level of the MWC unit(s). 4. Temperature of the flue gases at the inlet of the fabric filter (4-hour block average). iii. The highest 6-minute opacity level measured: The value shall be based on all 6-minute average opacity levels recorded by the continuous opacity monitoring system. iv. The Owner or Operator shall include the following four records for the usage of activated carbon: 1. The average carbon feed rates recorded during the most recent dioxins/furans and mercury stack tests. 2. The lowest 8-hour block average carbon feed rate recorded during the year. 3. The total carbon purchased and delivered to the facility for each calendar quarter. If the Owner or Operator chooses to evaluate total carbon purchased	Annually (received by DES no later than February 1st of the following year)	EU01 & EU02	Env-A 3307.02(b)

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	and delivered on a municipal waste combustion unit basis, the total carbon purchased and delivered for each individual MWC unit at the facility shall be recorded. 4. The required quarterly carbon usage for the MWC plant calculated using equation 1 or 2 (Table 5, Item 7). If the Owner or Operator chooses to evaluate required quarterly usage for carbon on MWC unit basis, the required quarterly usage for each MWC unit at the facility shall be recorded. v. The total number of days that the Owner or Operator did not obtain the minimum number of hours of data for five pollutants or parameters. The reasons for not obtaining the data and corrective actions taken by the facility to obtain the data in the future shall be included. Data on the following items shall be included: 1. Sulfur dioxide emissions. 2. Carbon monoxide emissions. 3. Load level of the MWC unit(s). 4. Temperature of the flue gases at the inlet of the fabric filter. 5. Carbon feed rate. vi. The number of hours the Owner or Operator has excluded data from the calculation of average levels (the reasons for excluding it shall be included). Data for the following five pollutants or parameters shall be included: 1. Sulfur dioxide emissions. 2. Carbon monoxide emissions. 3. Load level of the MWC unit(s). 4. Temperature of the flue gases at the inlet of the baghouse. 5. Carbon feed rate. vii. A notice of facility's intent to be on a reduced stack testing schedule for Dioxins/Furans, PM, Cadmium, Lead, Mercury, Opacity, HCl and fugitive ash during the following calendar year if the facility is eligible for alternative scheduling. viii. A summary of any emission or parameter level that did not meet the limits specified in this permit. ix. A summary of the data in Item #10.b.i through iv of Table 9 from the year preceding the reporting year which gives DES a summary of the performance of the MWC unit(s) over a 2-year period.			

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	x. Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours.			
11.	*Semi-annual Reports* a. The Owner or Operator shall submit a semiannual report on any recorded emission or parameter level that does not meet the requirements specified in this permit. Upon approval by DES, the Owner or Operator may submit electronic reports. b. The Owner or Operator shall submit semiannual reports according to the following schedule: i. For data collected during the first half of a calendar year, the semiannual report shall be submitted by August 1 of that year. ii. For data collected during the second half of the calendar year, the semiannual report shall be submitted by February 1 of the following year. c. The Owner or Operator shall include the following three items in the semiannual out-of-compliance reports: i. For any of the following five pollutants or parameters that exceeded the limits specified in this permit, the calendar date they exceeded the limits, the averaged and recorded data for that date, the reasons for exceeding the limits, and the corrective actions taken by the facility shall be included: 1. Concentration of sulfur dioxide emissions. 2. Concentration of carbon monoxide emissions. 3. Load level of the MWC unit(s). 4. Temperature of the flue gases at the inlet of the fabric filter. 5. Average 6-minute opacity level; Data obtained from the continuous opacity monitoring system are not used to determine compliance with the limit on opacity emissions. ii. If the results of annual stack tests show emissions above the limits specified in Table 5, Item 1 as applicable for Dioxins/Furans, Cadmium, Lead, Mercury, Particulate matter, Opacity, Hydrogen chloride, and Fugitive ash, a copy of the test report that documents the emission levels and corrective actions taken by the facility shall be included. iii. The following two items shall be included regarding the use of activated carbon to control dioxins/furans or mercury emissions:	Semi-annually (received by DES no later than February 1st and August 1st of each calendar year)	EU01 & EU02	Env-A 3307.02(b)

Table 9 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Citation
	1. Documentation of all dates when the 8-hour block average carbon feed rate (calculated from the carbon injection system operating parameter) is less than the highest carbon feed rate established during the most recent mercury and dioxins/furans stack test (as specified in Table 8, Item #11.a.i). The following four items shall be included: ▪ Eight-hour average carbon feed rate. ▪ Reasons for occurrences of low carbon feed rates. ▪ Corrective actions taken by the Owner or Operator to meet the carbon feed rate requirement. ▪ The calendar date. 2. Documentation of each quarter when total carbon purchased and delivered to the facility is less than the total required quarterly usage of carbon. If the Owner or Operator chooses to evaluate total carbon purchased and delivered on a MWC unit basis, the total carbon purchased and delivered for each individual municipal waste combustion unit at the facility shall be recorded. The following five items shall be included: ▪ Amount of carbon purchased and delivered to the plant. ▪ Required quarterly usage of carbon. ▪ Reasons for not meeting the required quarterly usage of carbon. ▪ The corrective actions taken by the Owner or Operator to meet the required quarterly usage of carbon. ▪ The calendar date.			

IX. Requirements Currently Not Applicable

At the time of issuance of this Permit, Wheelabrator-Claremont is not subject to the requirements of:

1. 40 CFR 60 Subpart E, *Standards of Performance for Incinerators;*
2. 40 CFR 60 Subpart AAAA, *Standards of Performance for Small Municipal Waste Combustion Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001*.

General Title V Operating Permit Conditions

X. Issuance of a Title V Operating Permit

A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the five (5) years after issuance of this Permit.

B. Permit expiration terminates the Owner or Operator's right to operate the emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is **received by the Department** at least 6 months before the expiration date.

XI. Title V Operating Permit Renewal Procedures

Pursuant to Env-A 609.07(b), an application for renewal of this Permit shall be considered timely if it is **received by the Department** at least six months prior to the designated expiration date of the current Title V operating permit.

XII. Application Shield

Pursuant to Env-A 609.08, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

XIII. Permit Shield

A. Pursuant to Env-A 609.09(a), a permit shield shall provide that:

1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and
2. The Owner or Operator need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.

B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.09(b). It shall not apply to certain conditions as specified in Env-A 609.09(c) that may be incorporated into this Permit following permit issuance by DES.

C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Owner or Operator shall comply with the provisions of said requirement to the extent that it applies to the Owner or Operator, or device.

D. If DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.

E. Pursuant to Env-A 609.09(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.19 or to exercise its summary abatement authority.

F. Pursuant to Env-A 609.09(g), nothing contained in this section or in any Title V operating permit issued by the DES shall alter or affect the following:

1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;
2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;
3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;
4. The liability of an Owner or Operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;
6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the Owner or Operator pursuant to section 114 of the CAA; or
7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

XIV. Reopening for Cause

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.19(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.19(b) through (g).

XV. Administrative Permit Amendments

A. Pursuant to Env-A 612.01, the Owner or Operator may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 101 immediately upon submittal of the request.

B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

XVI. Operational Flexibility

A. Pursuant to Env-A 612.02, the Owner or Operator subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. At this point, DES has not included any permit terms authorizing emissions trading in this permit.

1. The change is not a modification under any provision of Title I of the CAA;
2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;
3. The Owner or Operator has obtained any temporary permit required by Env-A 600;
4. The Owner or Operator has provided written notification to the director and administrator of the proposed change and such written notification includes:
    a. The date on which each proposed change will occur;
    b. A description of each such change;
    c. Any change in emissions that will result;
    d. A request that the operational flexibility procedures be used; and
    e. The signature of the responsible official, consistent with Env-A 605.04(b);
5. The change does not exceed any emissions limitations established under any of the following:
    a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;
    b. The CAA; or
    c. This Title V Operating Permit; and
6. The Owner or Operator, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.

B. For changes involving the trading of emissions, the Owner or Operator must also meet the following conditions:

1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;
2. The Owner or Operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure

that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;

3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce emissions trades; and

4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.

C. For off-permit changes, the Owner or Operator must also meet the following conditions:

1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;

2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.04;

3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;

4. The Owner or Operator keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and

5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.

D. For section 502(b)(10) changes, the Owner or Operator must also meet the following conditions:

1. The written notification required above is made at least 7 days prior to the proposed change; and

2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.

E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.09.

XVII. Minor Modifications

A. Prior to implementing a minor permit modification, the Owner or Operator shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).

B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).

C. Pursuant to Env-A 612.05(h), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.

D. Pursuant to Env-A 612.05(a), the Owner or Operator shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

XVIII. Significant Permit Modifications

A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).

B. Prior to implementing the significant permit amendment, the Owner or Operator shall submit a written request to the Director which includes all the information as referenced in Env-A 612.06(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Owner or Operator shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.

C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(d), (e) and (f).

XIX. Title V Operating Permit Suspension, Revocation or Nullification

A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:

1. The Owner or Operator has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or

2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.

B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

XX. Inspection and Entry

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

XXI. Certifications

A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15th of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;
2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;
3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4. Any additional information required by the DES to determine the compliance status of the source.

B. Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

> "I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

EPA-New England, Region 1
5 Post Office Sq. Suite 100
Mail Code OES04-2
Boston, MA 02109-3912

XXII. Enforcement

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the

Owner or Operator from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), the Owner or Operator shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

XXIII. Emission-Based Fee Requirements

A. Env-A 705.01, *Emission-based Fees*: The Owner or Operator shall pay to the Division each year an emission-based fee for emissions from the facility.

B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fees*: The Owner or Operator shall determine the total actual annual emissions from the facility for each calendar year in accordance with the methods specified in Env-A 705.02.

C. Env-A 705.03, *Calculation of Emission-based Fees*: The Owner or Operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$FEE = E * DPT$$

where:

FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;
E = Total actual emissions as determined pursuant to Condition XXIII.B; and
DPT = The dollar per ton fee the Division has specified in Env-A 705.03[9].

D. Env-A 705.04, *Payment of Emission-based Fee*: The Owner or Operator shall submit, to the Division, payment of the emission-based fee so that the Division receives it on or before April 15th for emissions during the previous calendar year.

XXIV. Duty To Provide Information

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Owner or Operator shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Owner or Operator shall furnish to the DES copies of records that the Owner or Operator is required to retain by this Permit. The Owner or Operator may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

XXV. Property Rights

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

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[9] For additional information on emission-based fees, visit the DES website at http://des.nh.gov/organization/divisions/air/pehb/apps/fees.htm

XXVI. Severability Clause

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

XXVII. Emergency Conditions

Pursuant to 40 CFR 70.6 (g), the Owner or Operator shall be shielded from enforcement action brought for noncompliance with technology based[10] emission limitations specified in this Permit as a result of an emergency[11]. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Owner or Operator shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

A. An emergency occurred and that the Owner or Operator can identify the cause(s) of the emergency;

B. The permitted facility was at the time being properly operated;

C. During the period of the emergency, the Owner or Operator took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and

D. The Owner or Operator submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

XXVIII. Permit Deviation

Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII of this Permit. In accordance with Env-A 911, *Recordkeeping and Reporting Requirements for Permit Deviations,* the Owner or Operator shall maintain records and report to the DES deviations from Permit requirements as follows:

A. Recordkeeping Requirement – All Deviations – In accordance with Env-A 911.03, in the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and record the information per Env-A 911.03(b).

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[10] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[11] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

B. Excess Emissions Reporting Requirement - Excess Emission Deviations Only – In the event the permit deviation causes excess emissions, the Owner or Operator of the affected device, process, or air pollution control equipment shall:

i. Notify DES by telephone, fax, or e-mail (pdeviations@des.nh.gov) within 24 hours of discovery of the permit deviation[12]; and

ii. Submit a written report in accordance with Env-A 911.04(d) within 10 days of the discovery of the permit deviation reported in Section XXVIII B.

C. Reporting Requirements for Permit Deviations Continuing for Greater Than 9 Consecutive Days - In the event the deviation does not cause an excess emission but continues for a period greater than 9 consecutive days, the Owner or Operator of the affected device, process, or air pollution control equipment shall notify DES of the subsequent corrective actions to be taken by telephone, fax, or e-mail (pdeviations@des.nh.gov) on the tenth day of the permit deviation[12].

D. Semi-Annual Summary Report - Pursuant to Env-A 911.05, the Owner or Operator shall submit a summary of all permit deviations previously reported pursuant to Section XXVIII B. and C. and a list of all permit deviations recorded pursuant to Section XXVIII A. to DES in the Semi-Annual Permit Deviation and Monitoring report due January 31st and July 31st of each calendar year covering the periods of July 1st through December 31st and January 1st through June 30th, respectively, or an alternative time period approved by DES pursuant to Env-A 912.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.

[12] Unless it is Saturday, Sunday or a state legal holiday, in which event DES shall be notified on the next business day.